

## **REMARKS**

Claims 1-7, 9, 11-14, 16, 17, 25 and 29-32 are now pending in the application and stand rejected. The Examiner is respectfully requested to reconsider and withdraw the rejections in view of the amendments and remarks contained herein.

## **RESPONSE TO ARGUMENTS**

The Office Action states that the previous amendments for all independent claims are unsupported by the specification. The independent claims are further amended as discussed below. Applicants respectfully submit that there is support for the independent claims, *e.g.*, in paragraphs 23-26, 35-37 and 45, element 640 of Figure 7, and paragraph 54. Exemplary excerpts from the specification are as follows:

...The InfoBroker 46 provides resources and mechanisms for satisfying a QoS contract with a client. The InfoBroker 46 monitors system conditions during executions of QoS contracts and provides appropriate adaptation services as further described below. (paragraph 24) ...The InfoBroker 46 can commit system resources and mechanisms to satisfy QoS requirements, and can monitor and adapt system behaviors at runtime. (paragraph 26) ...The Operation Service 328 uses an initialization process 330 to initialize resource configuration for a QoS contract and coordinates services during the execution of a QoS contract. The Maintenance Service 332 may maintain one or more key QoS parameters for a QoS contract and may activate the Adaptation Service 340 upon threshold crossings with respect to such parameters. (paragraph 35) ...The Adaptation Service 340 dynamically changes resources and mechanisms 372 in order to restore key QoS parameters within normal ranges. The Adaptation Service 340 may also take actions upon contract violations by clients. Such actions may include, for example, slowing down message acceptance from a client which publishes far beyond its agreed publishing rate. When, for example, an observed parameter returns below its threshold value, the Maintenance Service 332 may request the Adaptation Service 340 to restore a QoS level according to the QoS contract. (paragraph 36) ...In one configuration, a common management interface is provided using an abstract Resource class indicated generally in Figure 7 by reference number 600....The interface 600 also allows resources at 636 to register monitoring probes and at 640 to expose adaptation mechanisms to the QoS management service

300. (paragraph 45) ...Configurations of the present invention can adapt resource allocations when runtime behaviors of clients change to enforce client QoS contracts. (paragraph 54)

Referring to paragraphs 38-42 and 47-48 of Applicants' specification, the Examiner has stated that "...Applicant has already conceded that Yanosy teaches these limitations (P.11) [in Applicants' response to the Final Office Action]...." It is unclear to Applicants' attorney specifically which limitations the Office considers Applicants as having conceded. Therefore, for at least the additional reasons discussed below, Applicants respectfully traverse the Examiner's statement.

#### **SPECIFICATION**

The amendment filed 09 August 2010 is objected to under 35 U.S.C. 132(a) as introducing new matter into the disclosure. This rejection is respectfully traversed.

As discussed above, Applicants submit that the disclosure provides support for the amendments to Applicants' claims. Applicants respectfully request that the objection to the specification be reconsidered and withdrawn.

#### **REJECTION UNDER 35 U.S.C. § 112**

Claims 1-7, 9-14, 16-26 and 28-32 stand rejected under 35 U.S.C. § 112, first paragraph, as failing to comply with the written requirement. This rejection is respectfully traversed.

As discussed above, Applicants submit that the disclosure provides support for the amendments such that one can determine enablement for the claims as amended.

Applicants respectfully request that the rejections under 35 U.S.C. § 112, first paragraph be reconsidered and withdrawn.

#### **REJECTION UNDER 35 U.S.C. § 102**

Claims 1-7, 9, 11-14, 16, 17, 25, 29-32 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Yanosy (U.S. Pat. Pub. No. 2003/0217128). This rejection is respectfully traversed.

Claim 1 is amended to recite in part:

...allocating at least one resource of the system to the client based on the negotiated contract; and  
when the client is using the at least one allocated resource:  
monitoring QoS parameters with regard to the negotiated contract to determine whether the client is using the at least one allocated resource in accordance with the negotiated contract, and changing the allocation specifically as to the client application of the at least one allocated resource in response to usage of the at least one allocated resource by the client application determined to be not in accordance with the negotiated contract;...

Claim 12 is amended to recite in part:

...the broker executable by the processor to:  
...while the client is using a resource allocated to the client as a result of the contract, manage the allocated resource in accordance with the contract and monitor the allocated resource to determine whether the client is using the allocated resource in accordance with the contract; and  
change a QoS attribute of the resource allocated to the client, the change specific to the client and based on a determination by the broker that a QoS parameter for the allocated resource has varied from a value established in the contract.

Claim 25 is amended to recite in part:

...instructions executable by the processor to, through the broker, create and directly manage the new resource at a middleware layer of the information system, wherein to directly manage the resource comprises to change a QoS attribute of the resource specifically as to the client and

based on a determination by the broker that a QoS parameter for the allocated resource has varied from a value established in the contract.

There does not appear to be any explicit disclosure in Yanosy of dynamically changing a specific resource allocation to an application that is already using that resource. Further, this kind of change would not appear to be inherent in Yanosy in view of the resources described in Yanosy. Yanosy discloses platform resources 32, 34 and 36 of a telecommunications service provider or operator. (paragraph 17) Such resources are circuit-based. There is no disclosure of interrupting a circuit to change QoS. Although the system might change QoS as to *prospective* user allocations on a network-wide basis, Yanosy does not describe dynamically changing QoS as to a resource allocated to a specific application while the application is using that resource, nor would such a capability appear to be inherent in the Yanosy system. For at least these reasons, the system of Yanosy cannot anticipate the recitations of claims 1, 12 and/or 25 as amended. Applicants respectfully submit that claim 1-7, 9-14,16-18 and 25 should be allowed in view of Yanosy.

#### **REJECTION UNDER 35 U.S.C. § 103**

Claims 10, 18-24, 26 and 28 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Yanosy (U.S. Pat. Pub. No. 2003/0217128) and further in view of Loewy et al. (U.S. Pat. Pub. No. 2004/0193703) ("Loewy"). This rejection is respectfully traversed.

Independent claim 19 is amended to recite in part:

...when the contract has resulted in a resource having been allocated to the service requester and when the service requester is using the allocated resource, monitor the QoS parameters in the contract pertaining

to the allocated resource to determine whether the contract is being adhered to by the service requester; and

adapt allocation of the resource to enforce the contract of the service requester when the service requester is using the at least one resource, the changing performed specifically as to the service requester and based on the determining.

Independent claim 26 is amended to recite in part:

...the broker further configured to create at least one new resource of the information system based on the contract, to monitor use of the created resource with regard to the contract and the given quality of service after the created resource has been allocated under the contract to the given client application and as the created resource is being used by the given client application, and to at least temporarily adapt use of the created resource by the given client application, as the resource is being used, to restore operation of the given client application under the contract to the given quality of service.

Independent claim 28 is amended to recite in part:

...the broker further configured to enforce the established contract by adapting the allocation specifically as to the client during a period in which the client uses the at least one resource outside the established contract.

As previously discussed, there does not appear to be any explicit disclosure in Yanosy of dynamically changing a specific resource allocation to an application that is already using that resource. Further, this kind of change would not appear to be inherent in Yanosy.

The Office acknowledges that "Yanosy does not expressly disclose that the information system includes a service-oriented architecture (SOA), said method performed as a service invoked by the client." The Office further states that it would have been obvious to "have added Loewy to Yanosy in order to improve scalability." It is not obvious how these two systems might be combined. The system of Loewy is

addressed to providing conformance and/or governance in a distributed architecture. (paragraph 2) On the other hand, the system of Yanosy is directed to mediating needs of software applications with capabilities of a network host platform. (abstract) Additionally, it is not obvious how such a combination would improve scalability. Further, “quality of service” (QoS) has a common meaning that is well known in the art. Applicants respectfully submit that would be an unreasonably broad interpretation of the term “quality of service” to apply it to providing conformance and/or governance in a distributed architecture. For at least these reasons, Applicants submit that claims 10, 18-24, 26 and 28 are not obvious in view of Yanosy and Loewy.

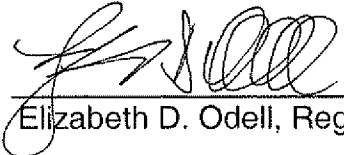
#### **CONCLUSION**

It is believed that all of the stated grounds of rejection have been properly traversed, accommodated, or rendered moot. Applicant therefore respectfully requests that the Examiner reconsider and withdraw all presently outstanding rejections. It is believed that a full and complete response has been made to the outstanding Office Action and the present application is in condition for allowance. Thus, prompt and favorable consideration of this amendment is respectfully requested.

If the Examiner believes that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at (314) 726-7500.

Respectfully submitted,

Dated: 7 April, 2011

By:   
Elizabeth D. Odell, Reg. No. 39,532

HARNESS, DICKEY & PIERCE, P.L.C.  
P.O. Box 828  
Bloomfield Hills, Michigan 48303  
(248) 641-1600

EDO/nr